

WIRELESS MULTI-ZONE THERMOMETER and HYGROMETER with CLOCK

Model No. 91756 User's Manual



BASE STATION



FEATURES AND SPECIFICATIONS

BASE STATION

- Indoor / wireless outdoor temperature, °C / °F selectable
- Indoor / wireless outdoor humidity
- Memory function to recall min / max temperature and humidity readings
- Temperature trend indicators
- Can accept up to 3 remote temperature and humidity sensors
- Remote channel auto-scroll
- Programmable high / low temperature alert
- Heat Index readings
- 12 / 24 hour clock with alarm
- Calendar
- Countdown timer 23 hours, 59 minutes, 59 seconds
- Low battery indicators for base station and remote
- Indoor temperature range: 14° F to 158° F (- 10° C to 70° C)
- Indoor humidity range: 20% to 95%
- Tabletop easel stand or wall mount
- Uses (2) AAA batteries (not included)

REMOTE SENSOR

- 433 MHz wireless transmission frequency
- Wireless data transmission to base station up to 100 ft. (range may vary based on the amount of interference present)
- LCD readout showing temperature and humidity
- Outdoor temperature range without wire probe: -4°F to 158°F (-20°C to 70°C)
- Outdoor temperature range with wire probe: -40° F to 158° F (-40° C to 70° C)
- Outdoor humidity range: 20% to 95%
- Table top or wall mount
- Uses (2) AAA batteries (not included)

Temperature tolerance: +/- $2^{\circ}F$ (+/- $1.1^{\circ}C$) Humidity tolerance: +/- 5% at 30% to 90%; +/- 7% at 20 to 29% and 91 to 95%

BATTERY INSTALLATION AND SETUP

Notes:

- 1. Do not mix old and new batteries.
- 2. Do not mix alkaline, lithium, standard (carbon zinc), or rechargeable (nickel cadmium) batteries.
- **3.** For maximum performance in normal conditions we recommend using good quality alkaline batteries. When temperatures are below 0°F, alkaline batteries can lose power resulting in a loss of remote transmission. If you reside in an area that experiences frequent temperatures near or below 0°F, we recommend using lithium batteries to minimize the loss of transmission. See additional notes in *Locating the Base Station and Remote Sensor* below.

Base Station Battery Installation

- Remove the printed vinyl label from the LCD screen of the base station
- Position the remote sensor near the base station
- Open the battery compartment at the back of the base station and insert (2) AAA batteries according to the polarity markings. Replace the battery compartment cover.
- Within a short time the RF signal icon **a** (located near the outdoor humidity reading) will start flashing. This indicates that the base station is ready to pick up the RF signal from the remote sensor. It will continue to flash for 3 minutes or until the signal from the remote sensor is detected.

Register the Remote Sensor

- Open the battery compartment at the back of the remote sensor and slide the channel selector switch to your desired channel. For the first remote you may select any channel, for additional remotes select any unused channel.
- Insert (2) AAA batteries according to the polarity markings. Be sure to install the batteries in the remote within the time that the RF signal icon is flashing on the base station. If the icon is not showing, press and hold **CHANNEL** for 3-4 seconds until the icon is showing.
- Press the °C/°F button inside the remote sensor battery compartment to display the temperature in °C or °F
- Once you see the outdoor readings on the base station the setup is complete. Replace the battery compartment cover.
- Press the UP/C/F button at the back of the base station to display the temperature in °C or °F
- Press CHANNEL to select the remote channel you want displayed permanently on the base station. Or keep pressing CHANNEL until you observe a circular arrow on the base station LCD display under the channel number. The unit will then auto-scroll, continually changing from channel to channel.
- Occasionally you may experience interference on a particular channel. If your base station has trouble picking up the RF signal, remove the batteries from the remote sensor, slide the channel selector switch to another channel and re-install the batteries.

Note: The TX button inside the remote sensor battery compartment is for factory testing. You will not need to use it.

Locating the Base Station and Remote Sensor

- Choose a suitable place for the base station and remote outdoor sensor, within the transmission distance.
- Place the base station near a window, but away from direct sunlight or sources of heat or air conditioning to ensure accurate temperature readings. The remote sensor is water resistant, but not waterproof. Locate the sensor out of direct sunlight, in an area where it will not be exposed to rain, snow or ice.
- The location you choose is critical for maximizing the transmission range. The remote sensor is designed to transmit up to 100 ft. unimpeded. Although the RF signal may travel through solid surfaces or objects, transmitting through walls, metal doors, metal framed windows, thick concrete, stone or brick may reduce the transmission range. To optimize the transmission distance, the base and remotes should be positioned in locations that minimize these obstructions. Interference from other sources such as home security systems, wireless doorbells and wireless home entertainment equipment may interrupt the transmission signal temporarily.
- In areas of extreme low temperatures (below 0°F), re-locate the remote sensor indoors and use a remote sensor wire. The sensor wire is not included with the unit and can be purchased separately by contacting Springfield Precision Instruments at 1-888-809-3284. Plug the sensor wire into the remote and route the wire through a nearby window. Be sure to plug in the wire securely. **Note**: The sensor wire will transmit outdoor temperature only, not humidity.

OPERATING INSTRUCTIONS

MODE BUTTON

Starting from the normal time display, press **MODE** to scroll through Alarm time 1 (A1), Alarm time 2 (A2), Timer, back to normal time display.

Note: When entering your settings, you can press and hold the UP or DOWN button for fast setting.

SETTING THE CLOCK AND CALENDAR

- Press and hold the SET/AL button until the hour is flashing
- Press **UP** or **DOWN** buttons to adjust the hour
- Press SET/AL and the minutes will be flashing
- Press **UP** or **DOWN** to adjust the minutes
- Press **SET/AL** and the month will be flashing
- Press UP or DOWN to adjust the month
- Press SET/AL and the day will be flashing
- Press UP or DOWN to adjust the day
- Press **SET/AL** and the year will be flashing
- Press UP or DOWN to adjust the year
- Press **SET/AL** to lock in the settings

12 / 24 Hour Clock

Press **DOWN 12/24** to select either 12 hour or 24 hour clock display.

Display the Calendar

Press **SET/AL** to scroll through:

- 1) normal time display (hour / minute / day)
- 2) hour / minute / second display
- 3) calendar
- 4) normal time display

ALARM CLOCK WITH SNOOZE

Setting the Alarm Time

Two different alarm times can be set, Alarm 1 and Alarm 2. Use **MODE** to scroll to Alarm 1 (A1) or Alarm 2 (A2).

- To set Alarm 1; In normal time display, press the **MODE** button once and the Alarm 1 time and (A1) will show.
- Press the **SET/AL** button for 3-4 seconds until the alarm hour flashes •
- Press UP or DOWN to set the alarm hour •
- Press **SET/AL** and the minutes will be flashing
- Press UP or DOWN to set the alarm minutes
- Press SET/AL to lock in the settings. The alarm is now activated and the alarm bell icon will show next • to the time.
- Press MODE to get to Alarm 2 or to return to normal time display •
- If no buttons are pushed within 20 seconds, the unit will revert to the normal time display automatically •
- To set Alarm 2; When Alarm 2 (A2) is showing on the display, follow the same setup sequence as for Alarm 1. •

De-activating the Alarm

To de-activate an alarm, press MODE to choose the alarm (A1 or A2) that you want to de-activate. Press SET/AL until the alarm bell icon is no longer showing. Your alarm time settings will remain and you can re-activate the alarm by following the instructions below.

Activating the Alarm

Press the **MODE** button to choose the alarm (A1 or A2) that you want to activate. Press **SET/AL** to activate (the alarm bell icon and 1 or 2 will show). The alarm will sound at the time you have entered.

Silencing the Alarm

- When the alarm sounds press any button on the base station to silence the alert or press **SNOOZE** to activate the snooze function
- When snooze is activated the Zzz symbol will appear and the alarm will sound again in 5 minutes •
- When the alarm sounds again, press SNOOZE to continue the snooze function or press any button on the base station • to discontinue snooze
- The alarm icon will remain on the display and the alarm will sound every day at the pre-set time until the alarm is de-• activated

MAX / MIN MEMORY

Use the MAX/MIN button to display the highest and lowest indoor and outdoor temperature and humidity readings since the last reset.

- Press MAX/MIN once to display the highest readings recorded since last reset. MAX is shown on the display. •
- Press **MAX/MIN** a second time to display the lowest readings recorded since last reset. MIN is shown on the display. • Press MAX/MIN to return to the normal display •
- •
- To clear and reset the max/min records, when either the MAX or MIN record is shown on the LCD display, press and hold MAX/MIN for 3-4 seconds until the beep sounds

TEMPERATURE ALERTS

You can program your weather center to sound an alert whenever the indoor or outdoor temperature exceeds the upper or lower pre-set level. The outdoor alert can be set for any remote channel.

Setting the Indoor Temperature Alert

- Press and hold the **ALERT** button for 3-4 seconds. The high temperature limit icon **▲** and indoor temperature will be flashing.
- Press **UP** or **DOWN** to select the high temperature alert level •
- Press **ALERT** and the low temperature limit icon **▼** and temperature will be flashing

- Press **UP** or **DOWN** to select the low temperature alert level
- Press **ALERT** to lock in the settings. The temperature alerts are activated and both the low and high limit icons will be showing.

Setting the Outdoor Temperature Alert

- Press and hold the ALERT button for 3-4 seconds
- Press **CHANNEL** to select the channel on which you want to set the alert (1, 2 or 3)
- The high temperature limit icon and outdoor temperature for the channel you selected will be flashing
- Press UP or DOWN to select the high temperature alert level
- Press ALERT and the low temperature limit icon and temperature will be flashing
- Press UP or DOWN to select the low temperature alert level
- Press **ALERT** to lock in the settings. The temperature alerts are activated and both the low and high limit icons will be showing.

Activating and De-Activating the Temperature Alerts

- Press **ALERT** to activate or de-activate the temperature alerts. When the alert function is activated, both the high and low limit icons will show.
- When de-activated, your temperature alert settings will remain and can be re-activated at any time.

HEAT INDEX

Heat Index is the "feels like", or apparent temperature. It is a function of temperature and humidity. As relative humidity increases, the air seems warmer than it actually is because the body is less able to cool itself via evaporation of perspiration. The HEAT INDEX temperature is usually higher than the actual air temperature.

Press the HEAT INDEX button to view the readings. HI will show above the indoor and outdoor temperature readings.

COUNTDOWN TIMER

To set the countdown timer:

- Press **MODE** until you get to the timer display
- Press and hold SET/AL until the hours are flashing
- Press **UP** or **DOWN** to set the hours
- Press **SET/AL** and the minutes will be flashing
- Press UP or DOWN to set the minutes
- Press SET/AL and the seconds will be flashing
- Press UP or DOWN to set the seconds
- Press **SET/AL** to lock in the settings
- Use **SET/AL** to start, pause and restart the timer
- When the timer sounds, press any button to turn it off

TEMPERATURE TREND ARROWS

The arrows to the left of the indoor and outdoor temperature readings indicate the general temperature trend; increasing, stable or decreasing.

LOW BATTERY INDICATORS

Low battery indicators are located on the base station display near the outdoor temperature reading (for the remote sensor) and near the indoor temperature reading (for the base station). When a low battery icon appears, replace the batteries as soon as possible with a fresh set according to the **<u>BATTERY INSTALLATION AND SETUP</u>** section of this manual. **Note**: When the old batteries are removed from the unit, you will lose your clock, alarm and temperature alert settings.

PURCHASING ADDITIONAL REMOTE SENSORS

Additional temperature / humidity sensors may be ordered directly from Springfield Precision Instruments by calling 1-888-809-3284. The remote sensor for this unit is SPRINGFIELD P/N 91912. Please have a major credit card ready when placing the call.

FCC STATEMENT OF COMPLIANCE

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

1) This device may not cause harmful interference, and

2) This device must accept any interference received, including interference that may cause undesired operation. Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

LIMITED WARRANTY

Springfield warrants this product to be free from defects in workmanship or material for a period of one year from the date of purchase. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF FITNESS AND MERCHANTABILITY ARE HEREBY LIMITED IN DURATION TO A PERIOD ENDING ONE YEAR FROM THE DATE OF PURCHASE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, which vary, from state to state. During the warranty period, such defects will be repaired or the defective instrument will be replaced at our option. This warranty does not cover damages through accident or misuse. IN ADDITION, SPRINGFIELD IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES INCURRED AS A RESULT OF DEFECT. Repair or replacement will be made at our option without additional charge if the instrument is returned postpaid with \$5.00 for return postage and handling to:



PRECISION INSTRUMENTS 76 Passaic Street, Wood-Ridge, NJ 07075-1091 1-888-809-3284 Made in China ©2009 Springfield Precision Instruments, Inc. All Rights Reserved